



# City of Eureka, California

## Class Specification

This is a class specification and not an individualized job description. A class specification defines the general character and scope of responsibilities of all positions in a job classification, but it is not intended to describe and does not necessarily list every duty for a given position in a classification.

<b>Class Title</b>	<b>Engineering Technician II</b>
<b>Class Code Number</b>	<b>5245</b>

### General Statement of Duties

Performs a variety of technical, office, and field engineering work and provides support to professional level engineering staff; performs directly related work as required.

### Distinguishing Features of the Class

The principal function of an employee in this class is to perform various technical, office, and field engineering work in support of professional level engineering staff. The work is performed under the supervision and direction of an assigned supervisor, but considerable leeway is granted for the exercise of independent judgement and initiative. This class is distinguished from the class of Engineering Technician I by the performance of the full range of engineering technician duties which requires greater technical knowledge and additional years experience to perform. The nature of the work performed requires an employee in this class to establish and maintain effective working relationships with all others contacted in the course of work. The principal duties of this class are performed in a general office environment and in the field, involving exposure to a wide variety of weather, terrain, and safety conditions.

### Examples of Essential Work (Illustrative Only)

- Prepares plans and specifications for public works construction projects, including conducting a variety of surveys for creation of sidewalks, utility lines, and topography maps, collecting all pertinent information to create useful maps, issuing permits and work orders required for construction activities to public clients, and evaluating building plans for compliance with public works standards;

- Performs construction inspections of public works projects to ensure compliance with contractual agreements, plans, and specifications, including preparing and recommending progress payments and change orders, evaluating possible public improvements as needed, ensuring work performed adheres to City standards, determining and noting major and minor defects, and evaluating appropriate actions in order to remedy defects as needed;
- Prepares, updates, reproduces, and distributes maps, drawings, blueprints, and other related files as requested, including maintaining accurate files and updating as necessary;
- Reviews building permit applications for necessary public improvement requirements;
- Prepares a variety of legal documents, including legal descriptions and construction project contract documents;
- Issues permits for the performance of construction projects in the public right of way;
- Creates and designs departmental databases utilizing specified computer software, including setting drawing standards, compiling data pertinent to each drawing, entering and proofreading data, and linking data to GIS database;
- Answers questions and provides information to the public regarding various engineering activities in a timely and courteous manner;
- Keeps immediate supervisor and designated others accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems;
- Attends meetings, conferences, workshops, and training sessions and reviews publications and audio-visual materials to become and remain current on principles, practices, and new developments in assigned work areas;
- Communicates and coordinates regularly with appropriate others to maximize the effectiveness and efficiency of interdepartmental operations and activities;
- Performs other directly related duties consistent with the role and function of the classification.

### **Required Knowledge, Skills, and Abilities**

- Substantial knowledge of relevant City and State codes, ordinances, laws, and regulations;
- Substantial knowledge of City and department operations, policies, and procedures;
- Substantial knowledge of principles and practices of civil engineering as applied to a wide variety of engineering activities and projects;
- Substantial knowledge of construction plans and specifications;
- Substantial knowledge of basic geometry, trigonometry, and algebra as applied to routine engineering computations and a variety of technical engineering duties;
- Substantial knowledge of techniques and practices of land surveying;
- Substantial knowledge of equipment and instruments used in surveying and drafting work;
- Substantial knowledge of the methods, practices, equipment, and techniques of manual and computer aided drafting;
- Substantial knowledge of the methods and techniques of construction inspection;
- Ability to accurately read and interpret project specifications, blueprints, construction plans, and other project documentation;
- Ability to perform effective inspections of City public works projects and recognize and address any compliance issues that may exist;
- Ability to effectively and efficiently perform complex engineering and mathematical calculations with speed and accuracy;

- Ability to perform engineering design work under supervision of a Civil Engineer;
- Ability to perform manual and computer aided drafting;
- Ability to prepare designs for capital improvement projects following pre-determined standards and criteria;
- Ability to read and explain maps, construction plans, specifications, change orders, and survey data;
- Ability to participate in the inspection of public works projects for compliance with standards and specifications;
- Ability to interpret and apply state and local policies, procedures, laws, codes and regulations;
- Ability to compile rough technical data and prepared basic statistical narrative reports from field studies;
- Ability to learn to reduce, interpret, and apply field notes in performance of drafting and survey duties;
- Ability to use and care for drafting, surveying, and mechanical instruments and tools;
- Ability to establish and maintain effective working relationships with assigned supervisors, other City employees, contractors, engineers, property owners, and the general public;
- Ability to effectively respond to and resolve concerns and questions from the public;
- Ability to understand and interpret engineering plans and specifications;
- Ability to prepare and maintain accurate engineering records;
- Ability to effectively operate and utilize all relevant equipment;
- Ability to make quick and accurate calculations;
- Ability to communicate effectively with others, both orally and in writing, using both technical and non-technical language;
- Ability to understand and follow oral and/or written policies, procedures, and instructions;
- Ability to prepare and present accurate and reliable reports containing findings and recommendations;
- Ability to operate a personal computer using standard or customized software applications appropriate to assigned tasks;
- Ability to use logical and creative thought processes to develop solutions according to written specifications and/or oral instructions;
- Ability to perform a wide variety of duties and responsibilities with accuracy and speed under the pressure of time-sensitive deadlines;
- Ability and willingness to quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology;
- Integrity, ingenuity, and inventiveness in the performance of assigned tasks.

### **Acceptable Experience and Training**

Any combination of training and/or experience which is equivalent to:

- High School Diploma or GED supplemented by college or other courses sufficient to provide the necessary knowledge, skills, and abilities; and
- Some (at least 2 years) experience as an Engineering Technician I.

### **Required Special Qualifications**

- Valid Class C California State Driver's License.

<b>Essential Physical Abilities</b>
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- Sufficient clarity of speech and hearing or other communication capabilities, with or without reasonable accommodation, to enable the employee to communicate effectively;
- Sufficient vision or other powers of observation, with or without reasonable accommodation, to enable the employee to review a wide variety of materials in electronic or hard copy form;
- Sufficient manual dexterity, with or without reasonable accommodation, to enable the employee to operate a personal computer, telephone, and other related equipment;
- Sufficient personal mobility and physical reflexes, with or without reasonable accommodation, to enable the employee to safely lift, move, or maneuver whatever may be necessary to successfully perform the duties of their position;
- Sufficient personal mobility and physical reflexes, with or without reasonable accommodation, to enable the employee to efficiently function in a general office and field environment.